



State of Idaho  
Department of Environmental Quality  
Air Quality Division

**AIR QUALITY PERMIT  
STATEMENT OF BASIS**

**Permit to Construct No. P-060317**

**Draft for Public Comment**

**J. R. Simplot Company, Don Plant**

**Pocatello, ID**

**Facility ID No. 077-00006**

**March 14, 2008**

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**Permit Writer**

The purpose of this Statement of Basis is to satisfy the requirements of IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho, for issuing air permits.

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## STATEMENT OF BASIS

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<b>Location:</b>	Pocatello, Idaho	<b>Facility ID No.</b> 077-00006

### Acronyms, Units, and Chemical Nomenclature

acfm	actual cubic feet per minute
AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
CAA	Clean Air Act
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
HAPs	Hazardous Air Pollutants
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
lb/hr	pound per hour
MACT	Maximum Achievable Control Technology
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	nitrogen oxides
NSPS	New Source Performance Standards
PC	permit condition
PM	particulate matter
PM <sub>10</sub>	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PSD	Prevention of Significant Deterioration
PTC	permit to construct
PTE	potential to emit
Rules	Rules for the Control of Air Pollution in Idaho
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SM	Synthetic Minor
SO <sub>2</sub>	sulfur dioxide
SO <sub>x</sub>	sulfur oxides
T/yr	tons per year
UTM	Universal Transverse Mercator
VOC	volatile organic compound

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### 1. FACILITY INFORMATION

#### 1.1 Facility Description

The No. 300 sulfuric acid plant, also known as the No. 3 sulfuric acid plant, produces sulfuric acid using a single contact process to burn elemental sulfur. The elemental sulfur is oxidized (burned) to produce sulfur dioxide (SO<sub>2</sub>). The SO<sub>2</sub> is then cooled through a waste-heat boiler and reacted with oxygen in a multipass, four-bed catalytic converter to form sulfur trioxide (SO<sub>3</sub>). The SO<sub>3</sub> is then sent to an absorber tower where it is absorbed into a sulfuric acid solution. The emissions from the absorbing tower are controlled with a DynaWave Reverse Jet Scrubber and a packed-bed ammonia scrubber.

#### 1.2 Permitting History

This PTC is for a modification at an existing Tier I facility. The following information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

November 8, 2005	Tier I Operating Permit No. T1-040313 issued for incorporation of settlement agreement (A)
April 5, 2004	Tier I Operating Permit No. T1-9507-114-1 issued for incorporation of settlement agreement (S)
December 24, 2002	Tier I Operating Permit No. 077-00006 issued for initial permit (S)
June 15, 2001	PTC No. 077-00006 issued for the 300 Sulfuric Acid Plant Restoration Project (A)
December 11, 2000	15-day pre-permit construction approval issued for the 300 Sulfuric Acid Plant Restoration Project (A)
December 3, 1999	Tier II Operating Permit 077-00006 issued for the PM <sub>10</sub> SIP operating permit (A)
July 13, 1999	Tier II Operating Permit 077-00006 issued for the PM <sub>10</sub> SIP operating permit (S)
May 3, 1996	PTC No. 077-00006 issued for modification of sulfuric acid plant (A)
June 29, 1995	Tier II Operating Permit 077-00006 issued for the PM <sub>10</sub> SIP operating permit (A)
December 18, 1989	Plant Expansion PSD Permit No. 1260-0060 issued for the plant expansion project (A)
January 25, 1985 through January 30, 1986	Air Pollution Operating Permit No. 1260-0006-291 issued for facility-wide initial permit (A)

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## 2. APPLICATION SCOPE

The scope of this permit action is as follows:

- Eliminate the throughput limit for the No. 300 sulfuric acid plant
- Reduce the NO<sub>x</sub> emission rate from 64 T/yr to 58 T/yr for the No. 300 sulfuric acid plant
- Revise Permit Condition 2.3 (renumbered 2.5) to eliminate the second paragraph of the visible fugitive emissions requirement
- Revise Tier I operating permit by administrative amendment to incorporate the PTC in accordance with IDAPA 58.01.01.209.05(c).

This permit to construct is being processed in accordance with IDAPA 58.01.01.209.05(c).

### 2.1 Application Chronology

June 30, 2006	DEQ received PTC application
July 19, 2006	DEQ received PTC application fee
August 18, 2006	DEQ declared the application complete
October 13, 2006	DEQ issued facility draft PTC
October 27, 2006	DEQ received comments from facility
November 6, 2006	J. R. Simplot Company requested that the permit not be issued pending further discussion with DEQ
December 21, 2007	J. R. Simplot Company submits alternate monitoring proposal
February 1, 2008	J. R. Simplot Company submits additional information regarding monitoring
March 6, 2008	J. R. Simplot Company submits additional information regarding monitoring and calculations
March 14, 2008	DEQ issues second facility draft

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### 3. TECHNICAL ANALYSIS

#### Emission Unit and Control Device

**Table 3.1 EMISSION UNIT AND CONTROL DEVICE INFORMATION**

Description	Control Device
Sulfur unloading, hot pit, and storage tank	None
Drying tower	None
Acid tanks (2) sulfuric acid storage tanks	None
Sulfur furnace	None
Waste heat boiler	None
Converter with internal steam superheater and heat exchanger	None
Economizers and cold reheat exchanger	None
Intermediate and final absorbing towers	DynaWave Reverse Jet Scrubber and packed-bed ammonia scrubber, Stack: 4.5 ft diameter 202 ft high 102,000 acfm 85 °F

### 3.2 Emissions Inventory

Table 5.1 shows the estimated emissions after the change (removal of the throughput limit) to the No. 300 sulfuric acid plant.

**Table 5.1 PROJECTED FUTURE EMISSIONS**

Source	PM <sub>10</sub> <sup>a</sup>		Nitrogen Oxides		Sulfur Dioxide		H <sub>2</sub> SO <sub>4</sub> <sup>b</sup>		Ammonia	
	(lb/hr) <sup>c</sup>	(T/yr) <sup>d</sup>	(lb/hr) <sup>c</sup>	(T/yr) <sup>d</sup>	(lb/hr) <sup>c</sup>	(T/yr) <sup>d</sup>	(lb/hr) <sup>c</sup>	(T/yr) <sup>d</sup>	(lb/hr) <sup>c</sup>	(T/yr) <sup>d</sup>
No. 300 sulfuric acid plant	11.25	49	13	58	137.5	602	3	13	2.5	11

a)Particulate Matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers

b)Sulfuric acid mist

c)Pounds per hour

d)Tons per year

Table 5.2 shows permitted limits. The PM<sub>10</sub> emissions limit is being established by source testing in accordance with Permit Condition 2.10.3.

**Table 5.2 PERMITTED EMISSIONS**

Source	PM <sub>10</sub> <sup>a</sup>		Nitrogen Oxides		Sulfur Dioxide		H <sub>2</sub> SO <sub>4</sub> <sup>b</sup>		Ammonia	
	(lb/hr) <sup>c</sup>	(T/yr) <sup>d</sup>	(lb/hr) <sup>c</sup>	(T/yr) <sup>d</sup>	(lb/3-hr) <sup>c</sup>	(T/yr) <sup>d</sup>	(lb/hr) <sup>c</sup>	(T/yr) <sup>d</sup>	(lb/hr) <sup>c</sup>	(T/yr) <sup>d</sup>
No. 300 sulfuric acid plant	Source test	Source test	----	58	170 <sup>e</sup>	750	3	13	2.5	11

a)Particulate Matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers

b)Sulfuric acid mist

c)Pounds per hour

d)Tons per year

e)Three-hour average

#### PM<sub>10</sub> Emissions

The PM<sub>10</sub> emissions have not been limited because a PM<sub>10</sub> emission limit will be established as directed by the Compliance Agreement and Voluntary Order issued on April 21, 2004. Item No. 9 of the order

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states, “The hourly  $PM_{10}$  RACT emissions limit (pounds per hour) for the No. 300 sulfuric acid plant shall be set by conducting five performance tests on the sulfuric acid plant stack. The limit will be determined based on the 95% confidence interval: limit = average of five tests plus 1.96 times the standard deviation of the five tests. The annual  $PM_{10}$  RACT limit (tons per year) shall be set by multiplying the pound per hour RACT limit by 8760 hours per year and dividing by 2000 pounds per ton. The first performance test shall be conducted prior to December 30, 2004, and tests shall be conducted annually thereafter. The sum of the emissions measured from Method 5 and 202 shall be considered  $PM_{10}$ . ”

The emissions test results conducted per the compliance agreement prior to the permit application are as follows:

**Table 5.3  $PM_{10}$  COMPLIANCE AGREEMENT TEST RESULTS**

Year	Tested $PM_{10}$ Emission Rate lb/hr	Production Rate During Test T/hr	Modeled $PM_{10}$ Emissions lb/hr
2004	6.52	72.2	11.25
2005	9.8	72.5	

If  $PM_{10}$  emissions increase linearly with increased production, the projected emissions based on the average tested  $PM_{10}$  rate of 8.17 lb/hr and 2,400 T/day production would be 11.25 lb/hr. The facility does not anticipate exceeding 2,000 T/day of production. The emissions are estimated and were modeled based on a 20% higher production rate than is anticipated.

### **NO<sub>x</sub> Emissions**

The NO<sub>x</sub> actual emissions were estimated based on source testing. The test results show that the estimated emissions are less than the proposed permit limit, which is established using an emission factor of 0.16 lb NO<sub>x</sub>/T production of sulfuric acid. This emission factor originated from a previous permit action which established a worst-case emission factor of 0.20 lb NO<sub>x</sub>/T production. Testing has shown that this emission factor (0.20 lb/T) overestimates the actual emissions, so the emission factor was reduced to 0.16 lb/T. The facility estimates that the production of sulfuric acid will not exceed 2,000 T/day. The calculation is as follows:

$$0.16 \text{ lb/T} \times 1 \text{ T/2,000 lb} \times 2,000 \text{ T/day} \times 365 \text{ d/yr} = 58.4 \text{ T/yr}$$

The facility has requested that the permit limit be lowered from the existing NO<sub>x</sub> limit of 64 T/yr to a new limit of 58 T/yr based on this emissions estimate.

### **SO<sub>2</sub> Emissions**

There are two methods to estimate the emissions rate of SO<sub>2</sub> from the No. 300 sulfuric acid plant. The results are different depending on which method is used. Both methods use the measured concentration of SO<sub>2</sub>. One of the methods determines the mass emission rate by multiplying the SO<sub>2</sub> concentration by the actual measured gas flow rate from the stack. The other method determines the mass emission rate by using an equation and an estimated stack gas flow rate from 40 CFR 60 Subpart H (alternate method). The method which uses the actual flow rate (measured flow rate method) shows a higher emission rate (7% - 10%) than the alternate method (which uses the estimated flow rate). The alternate method was designed for the NSPS standard. DEQ discussed this issue with Walter Smith, a source testing consultant, on January 16, 2008. He believed that if the percent oxygen and production rate are

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measured accurately, then the NSPS alternate method using the S-factor would provide a better representation of the real emissions. He said using a pitot tube (Method 2) to measure flow rate will provide “the right answer or higher than real” and that under less than perfect axial flow conditions the pitot tube will bias the flowrate high.

Source tests for SO<sub>2</sub> were done in 2004 and 2005 for the No. 300 sulfuric acid plant. The results are shown in Table 5.4.

**Table 5.4 300 SULFURIC ACID PLANT SOURCE TEST RESULTS**

Test Year	Emissions Rate NSPS Alternate Method (lb/hr)	Emissions Rate Measured Flow Rate Method (lb/hr)	Difference in Emissions (percent)
2004	78	86	10%
2005	94	101	7%

The facility’s application bases the future emission estimate on a test done in November 2003, because that had the highest emissions from testing done since the plant was modified in 2001. The emissions were determined based on the alternate method. The estimated actual emissions, permitted emissions, and percent of the permit limit for SO<sub>2</sub> are shown in Table 5.5.

**Table 5.5 SO<sub>2</sub> ESTIMATED EMISSIONS AND PERMIT LIMITS**

Source	SO <sub>2</sub> Estimated Actual Emissions		SO <sub>2</sub> Permit Limits		Percent of Limit	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
No. 300 sulfuric acid plant	137.5	602	170	750	81%	80%

### H<sub>2</sub>SO<sub>4</sub> Mist Emissions

The sulfuric acid mist emissions were estimated based on source testing. The test results for acid mist have not exceeded 0.02 lb/T. The original acid mist emission estimates for a previous permit action were based on 0.041 lb/T. The facility estimated the future emissions using a factor of 0.036 lb/T to estimate the emissions conservatively high. With the estimated future maximum throughput of 2,000 T/day, the average hourly acid mist emissions would be 0.036 lb/T x 2,000 T/day x 1 day/24 hours = 3 lb acid mist/hr, which is the limit. The annual emission estimate is calculated to be 3 lb/hr x 8760 hr/yr x 1 T/2,000 lb = 13.14 T/yr, which can be rounded off to 13 T/yr, which is the annual limit.

### Ammonia Emissions

The future emissions estimates for ammonia are based on emissions testing. The highest emissions test result was 0.1 lb/hr at a production rate of 72 T/hr. At the projected maximum production rate of 2,000 T/day, assuming ammonia emissions increase linearly with an increased throughput, the estimated average hourly ammonia emissions are projected to be 0.12 lb/hr. The limit is 2.5 lb/hr.

## 3.3 Ambient Air Quality Impact Analysis

No emissions are anticipated to increase above currently-permitted levels except PM<sub>10</sub> emissions, for which a limit has not been established. Modeling is not required for the pollutants which will not increase over permitted levels. The PM<sub>10</sub> emissions increase was calculated based on testing that was done to establish past actual PM<sub>10</sub> emissions and projected emissions as documented in Section 5.2 of



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this statement of basis. The modeled concentrations for this increase in emissions was calculated based on a previous AERMOD modeling analysis done as a part of the November 10, 2000, PTC application. The resulting ambient impact for the 24-hour standard and the annual standard are less than the significant contribution levels. This demonstrates to the satisfaction of the Department that the increase in PM<sub>10</sub> emissions will not cause or significantly contribute to a violation of the air quality standard for PM<sub>10</sub>.

#### 4. REGULATORY REVIEW

##### 4.1 Attainment Designation (40 CFR 81.313)

The facility is located in Power County which is designated as attainment or unclassifiable for PM<sub>10</sub>, PM<sub>2.5</sub>, CO, NO<sub>2</sub>, SO<sub>x</sub>, and Ozone. Reference 40 CFR 81.313.

##### 4.2 Permit to Construct (IDAPA 58.01.01.201)

A PTC is required for this permit modification because the removal of the throughput limit may result in an increase in PM<sub>10</sub> emissions greater than the modeling threshold as specified in the Air Quality Modeling Guideline, dated December 31, 2002. The current actual emissions of PM<sub>10</sub> are estimated, based on source testing, to be 8.17 lb/hr. The facility estimates that, after the removal of the throughput limit and the projected increase in throughput, to not exceed 11.25 lb/hr and 49 T/yr of PM<sub>10</sub> total, which includes existing emissions and the emissions increase.

No PM<sub>10</sub> limit is being established for the facility with this permit action for the following reasons:

- Although there is no permit limit on throughput, the facility does not anticipate exceeding a production rate of 2,000 T/day .
- The PM<sub>10</sub> emissions estimate is based on current test results and a production rate of 2,400 T/day (20% higher than the anticipated actual production rate).
- The modeling results for the PM<sub>10</sub> increase in emissions showed minimal impact (see Section 5.3 “Modeling” of this statement of basis).
- A PM<sub>10</sub> limit for the No. 300 sulfuric acid plant will be established in a future action as directed by the Compliance Agreement and Voluntary Order issued on April 21, 2004.

##### 4.3 Permit to Construct TAPs (IDAPA 58.01.01.210)

The applicant has not requested an increase in allowable levels of TAPs. The emissions of ammonia and sulfuric acid mist are expected to increase with the modification, but are estimated to not exceed existing permitted limits. Annual performance tests are required to verify that the emissions of these pollutants do not exceed the permit limits.

##### 4.4 Title V Classification (IDAPA 58.01.01.300, 40 CFR Part 70)

This PTC action modifies a PTC at a Tier I source. The Tier I operating permit incorporates the requirements of the PTC which is being modified. The throughput limit is being removed from the PTC. Unless the Tier I operating permit is also modified, the revised PTC would violate a condition in the existing Tier I. Therefore, both permits are being modified in accordance with IDAPA 58.01.01.209.05(c).

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### 4.5 PSD Classification (40 CFR 52.21)

This regulation may apply to PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and H<sub>2</sub>SO<sub>4</sub>.

*(a)(2) Applicability procedures. (i) The requirements of this section apply to the construction of any new major stationary source (as defined in paragraph (b)(1) of this section) or any project at an existing major stationary source in an area designated as attainment or unclassifiable under sections 107(d)(1)(A)(ii) or (iii) of the Act.*

The removal of the throughput limit for the 300 sulfuric acid plant is requested in order to allow an increase in throughput, which will result in an increase in actual emissions of PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and H<sub>2</sub>SO<sub>4</sub>. There is no request to increase any of the permitted emissions limits. The Don Plant is a major stationary source because the annual emissions exceed the major source threshold of one or more of the NSR pollutants.

Prior to determining if this PTC action constitutes a major modification, the “project” must be defined. A project is defined as follows:

*(52) Project means a physical change in, or change in the method of operation of, an existing major stationary source.*

There are no physical changes requested at the facility as a result of the removal of the throughput limit. The removal of the throughput limit will result in an increase in actual emissions, which constitutes a change in the method of operation.

A further determination is made that the increase in throughput does not cause any change in any other part of the facility. Other processes at the facility utilize sulfuric acid to make additional products. The increased amount of sulfuric acid in the No. 300 sulfuric acid plant will be used in other processes at the facility. This increased production from the No. 300 sulfuric acid plant will be used to reduce the amount of sulfuric acid that was previously purchased off-site. In the past, when the market demands, Simplot has purchased sulfuric acid to make up for shortfalls in the amount of sulfuric acid necessary to produce additional products. In 1998, Simplot purchased approximately 42,185 tons of additional sulfuric acid, and in 1999 Simplot purchased approximately 50,489 tons. In 2004, Simplot purchased approximately 2,643 tons of sulfuric acid for use in other processes at the plant. Therefore, because the facility has made up for shortfalls in sulfuric acid supply by purchasing additional sulfuric acid when needed, the other processes at the facility that require sulfuric acid are not dependent on the production capacity of the No. 300 sulfuric acid plant. The potential to emit of the other processes remain unchanged with an increase in the allowable production rate of sulfuric acid. The production rate increase will allow Simplot to reduce the amount of sulfuric acid that they purchase, but will not affect the production rate of any other process at the facility.

Because the increase in throughput does not modify any other process at the facility, the project is considered only the increase in throughput at the No. 300 sulfuric acid plant.

The next determination that must be made is whether the project is a major modification, as follows:

*(2)(i) Major modification means any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase (as defined in paragraph (b)(40) of this section) of a regulated NSR pollutant (as defined in paragraph (b)(50) of this section); and a significant net emissions increase of that pollutant from the major stationary source.*

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The project results in increases in PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and H<sub>2</sub>SO<sub>4</sub> emissions.

*(a) Except as otherwise provided in paragraphs (a)(2)(v) and (vi) of this section, and consistent with the definition of major modification contained in paragraph (b)(2) of this section, a project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases—a significant emissions increase (as defined in paragraph (b)(40) of this section), and a significant net emissions increase (as defined in paragraphs (b)(3) and (b)(23) of this section). The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.*

The determination must be made if the project causes a significant emissions increase from paragraph (xxvii), as follows:

*(40) Significant emissions increase means, for a regulated NSR pollutant, an increase in emissions that is significant (as defined in paragraph (b)(23) of this section) for that pollutant.*

Section 23(i) defines “significant.”

This modification involves an existing emissions unit.

The “baseline actual emissions” are defined in Section 48. The “projected actual emissions” are defined in Section 41(i).

The baseline actual emissions, projected actual emissions, permitted limits, requested allowables, and BAE – PTE (in accordance with (a)(41)(ii)(d)) are shown in Table 5.6. The emission estimates are based on source test data, which is summarized in the permit application.

**Table 5.6 PSD BASELINE ACTUAL EMISSIONS (BAE) TO POTENTIAL TO EMIT (PTE)**

Pollutant	Baseline Actual Emissions (98-99 data) (T/yr)	Projected Actual Emissions (T/yr)	Current Permitted Emissions (T/yr)	Requested Allowable Emissions (T/yr)	PTE – BAE (T/yr)	Significant Increase Limit (T/yr)	PSD Triggered?
PM <sub>10</sub>	36 <sup>a</sup>	49	No limit	49	13	15	N
SO <sub>2</sub>	797	602	750	750	- 47	40	N
H <sub>2</sub> SO <sub>4</sub>	6.4	13	13	13	6.6	7	N
NO <sub>x</sub>	27	58	64	58	31	40	N

<sup>a</sup>2004 and 2005 test data

The potential to emit is limited by permitted emission rate limits for all pollutants except PM<sub>10</sub>. For PM<sub>10</sub>, 40 CFR 52.21(r)(6), as follows, may apply.

*“The provisions of this paragraph (r)(6) apply to projects at an existing emissions unit at a major stationary source (other than projects at a Clean Unit or at a source with a PAL) in circumstances where there is a reasonable possibility that a project that is not a part of a major modification may result in a significant emissions increase and the owner or operator elects to use the method specified in paragraphs (b)(41)(ii)(a) through (c) of this section for calculating projected actual emissions.*

The facility estimated projected actual emissions based on PM<sub>10</sub> test data from actual operations in 2004 and 2005 and the highest projection of business activity (2,400 T/day production), which is part of the method specified to determine projected actual emissions in (b)(41)(ii)(a).

To assess whether (r)(6) is applicable, a determination must be made whether or not “there is a reasonable possibility that a project ... may result in a significant emissions increase.” DEQ has determined that there is not a reasonable possibility that this project may result in a significant increase

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in PM<sub>10</sub> emissions based on the following findings:

- The projected actual emissions for PM<sub>10</sub> are based on a production rate that is 20% higher (2,400 T/day) than the anticipated production rate that was used to calculate the emissions from the other pollutants. Although there is no permit limit on throughput, the facility does not anticipate exceeding a production rate of 2,000 T/day.
- In order to qualify as a significant increase (15 T/yr), assuming a linear increase of PM<sub>10</sub> with increases in production rate, the production rate would be 2770 T/day, or 38% more than the anticipated production rate of 2,000 (T/day).
- The emission rate of SO<sub>2</sub> is limited to 750 T/yr with projected actual emissions of 602 T/yr based on a production rate of 2,000 T/day. The production rate would be 2,492 T/day, assuming linear increase of SO<sub>2</sub> emissions with increases in production rate, in order to meet the permitted limit for SO<sub>2</sub>. Therefore, the SO<sub>2</sub> limit inherently limits the PM<sub>10</sub> emissions.
- A PM<sub>10</sub> limit for the No. 300 sulfuric acid plant will be established in a future action as directed by the Compliance Agreement and Voluntary Order issued on April 21, 2004. A PSD analysis may be conducted again at that time.

Based on these findings, it has been determined that the projected PM<sub>10</sub> emissions estimates are adequately conservative to conclude that there is not a reasonable possibility that the production rate increase may result in a significant emission increase for PM<sub>10</sub>.

### 4.6 NSPS Applicability (40 CFR 60)

Subpart H applies to this facility because it is a sulfuric acid production unit that commenced construction or modification after August 17, 1971.

### 4.7 CAM Applicability (40 CFR 64)

The scrubber is the only emissions control device, and it does not control emissions of a regulated air pollutant for Title V purposes. Therefore, CAM does not apply.

### 4.8 Permit Conditions Review

This section describes only those permit conditions (PC) that have been added, revised, modified or deleted as a result of this permitting action. All other permit conditions remain unchanged.

In the existing permit, some permit conditions contain both state-imposed limits and NSPS requirements in the same permit condition. In this permit action, each of those permit conditions was separated into two permit conditions; state requirements were separated from the NSPS requirements.

All references to “be kept on site” were changed to “remain at the facility” as an update to the current wording style.

References to No. 3 sulfuric acid plant were changed to No. 300 sulfuric acid plant.

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### Existing Permit Condition

2.1.1 *Sulfur dioxide. Emissions of SO<sub>2</sub> shall not exceed one hundred seventy (170) pounds per hour calculated as a 3-hour rolling average and shall not exceed seven hundred fifty (750) tons per any consecutive twelve (12) month period. Per 40 CFR 60.82, emissions of SO<sub>2</sub> shall not exceed four (4) pounds per ton of sulfuric acid produced.*

### Revised Permit Conditions

The following permit condition was rewritten to split off the 40 CFR 60.82 requirement from the existing requirement and to add the clarification that the production should be expressed as 100% H<sub>2</sub>SO<sub>4</sub>.

2.3.1 *Emissions of SO<sub>2</sub> shall not exceed one hundred seventy (170) pounds per hour calculated as a 3-hour rolling average and shall not exceed seven hundred fifty (750) tons per any consecutive twelve (12) month period.*

2.3.6 *Per 40 CFR 60.82, emissions of SO<sub>2</sub> shall not exceed four pounds per ton of sulfuric acid produced, the production being expressed as 100 percent H<sub>2</sub>SO<sub>4</sub>.*

### Existing Permit Condition

2.1.3 *Oxides of Nitrogen. Emissions of NO<sub>x</sub> shall not exceed sixty-four (64) tons per any consecutive twelve (12) month period.*

### Revised Permit Condition

This permit condition was changed to show the lower NO<sub>x</sub> emissions limit that was requested by the facility.

2.3.3 *Emissions of NO<sub>x</sub> shall not exceed 58 tons per any consecutive 12-month period.*

### Existing Permit Condition

2.1.4 *Particulate matter. A source test will be required to determine the emissions rate for PM<sub>10</sub>.*

### Revised Permit Condition

This permit condition was revised slightly to clarify that more than one source test is required (as required in the Compliance Agreement and Voluntary Order issued on April 21, 2004) and to remove the apparent future reference ("will be required") and change the reference to "shall be used" to indicate that the testing is currently occurring. Also, the reference to the origin of this permit condition was added.

2.3.4 *Source testing shall be used to determine the emissions rate for PM<sub>10</sub> in accordance with Provision 11 of the April 16, 2004 compliance agreement.*

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### Existing Permit Condition

#### 2.3 Visible Emission Limits

*Emissions from the #3 sulfuric acid plant stack, or any other stack, vent, or functionally equivalent opening associated with the #3 sulfuric acid plant, shall not exceed twenty percent (20%) opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period as required by IDAPA 58.01.01.625 (Rules for the Control of Air Pollution in Idaho).*

*Visible fugitive emissions shall not be observed leaving the property boundary for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period. Visible emissions from fugitive sources shall be determined by EPA Reference Method 22, as described in 40 CFR 60, Appendix A, or DEQ-approved alternative method.*

### Revised Permit Condition

#### 2.5 Visible Emission Limits

*Emissions from the #300 sulfuric acid plant stack, or any other stack, vent, or functionally equivalent opening associated with the #3 sulfuric acid plant, shall not exceed twenty percent (20%) opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period as required by IDAPA 58.01.01.625 (Rules for the Control of Air Pollution in Idaho).*

The second paragraph of this permit condition was removed as requested by the facility. Permit Condition 2.4 in the facility's Tier I operating permit adequately addresses the compliance demonstration for fugitive emissions. Permit Condition 2.4 in the Tier I operating permit is as follows:

*"The permittee shall conduct a monthly facility-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each monthly fugitive emission inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken."*

This PTC No. P-060317 will be incorporated into the Tier I operating permit, so Permit Condition 2.4 of the Tier I will continue to apply to this facility even though it is not in the PTC.

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### New Permit Condition

The existing limit for sulfuric acid vapor/mist limits the pounds per hour and tons per year, but not the NSPS-required pounds per ton of acid produced. Because the tons of acid produced will increase with the removal of the throughput limit, the NSPS limit must be expressed in the units as written in the NSPS regulation, in pounds of acid emitted per ton of acid produced.

2.3.7 *Per 40 CFR 60.83, emissions of acid mist, expressed as  $H_2SO_4$  shall not exceed 0.15 lb/ton of acid produced, the production being expressed as 100 percent  $H_2SO_4$ .*

### Existing Permit Condition

This permit condition was rewritten to show that the permittee is required to maintain an O&M manual, rather than Simplot specifically. Also, the manual is no longer required to be kept at the site, which will allow the O&M manual to be kept at the facility instead and is required to be made available to DEQ representatives upon request.

### Revised Permit Condition

#### Scrubber Operation

*The two-stage scrubber system shall be used to control pollution from the No. 300 sulfuric acid plant process at all times the plant is operating. The two stages shall include the packed-bed scrubber and the DynaWave reverse jet scrubber operated in series. The permittee shall maintain an Operations and Maintenance manual for the two stage scrubber. The Operations and Maintenance manual shall be made available to DEQ representatives upon request.*

### Deleted Permit Condition

The permit condition requiring reasonable control of fugitive emissions has been removed because it is in the facility-wide section of the Tier I operating permit.

### Reasonable Control of Fugitive Emissions

*All reasonable precautions shall be taken to prevent particulate matter from becoming airborne as required in IDAPA 58.01.01.651. In determining what is reasonable, considerations will be given to factors such as the proximity of dust-emitting operations to human habitations and/or activities and atmospheric conditions which might affect the movement of particulate matter. Some of the reasonable precautions include, but are not limited to, the following:*

- Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of lands;*
- Application, where practical, of asphalt, oil, water or suitable chemicals to, or covering of dirt roads, material stockpiles, and other surfaces which can create dust;*
- Installation and use, where practical, of hoods, fans and fabric filters or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations;*

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- *Covering, where practical, of open-bodied trucks transporting materials likely to give rise to airborne dusts;*
- *Paving of roadways and their maintenance in a clean condition, where practical; or*
- *Prompt removal of earth or other stored material from streets, where practical.*

#### **Existing Permit Condition**

##### *Continuous Emissions Monitoring – Demonstration of Compliance with NSPS standard*

*A continuous emissions monitoring system (CEMS) shall be installed, calibrated, maintained, and operated to demonstrate compliance on a continual basis with the NSPS standard for sulfur dioxide in Permit Condition 2.3.6. The continuous emissions monitoring system shall be operated in accordance with 40 CFR 60.13, 40 CFR 60.84, and 40 CFR 60 Appendix B. The continuous emissions monitoring system shall be installed and operational prior to conducting performance tests required under Permit Conditions 2.8 and 2.9.*

#### **Revised Permit Condition**

This permit condition was revised to remove the requirement to use the CEMS to demonstrate compliance on a continual basis with the NSPS standard. The revised permit condition is based on the NSPS requirement. Because the CEMS has already been installed, the part of the NSPS that requires installation was not included in the permit condition. Also, the applicability determination is referenced in the permit condition as requested by the facility.

##### *Continuous Monitoring – NSPS standard*

The No. 300 sulfuric acid plant is an affected unit in accordance with 40 CFR 60 Subpart H. In accordance with 40 CFR 60 Subpart H, a continuous emissions monitoring system (CEMS) for the measurement of sulfur dioxide shall be calibrated, maintained, and operated by J.R. Simplot Company.

#### **Existing Permit Condition**

The following existing permit condition was separated into state-required permit conditions and NSPS-required permit conditions. In the NSPS section of the testing permit condition, a statement is added to clarify that RATA testing is required to be done.



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### 4.2 Performance and Annual Compliance Tests

*The permittee shall conduct performance tests to demonstrate that the pollution control equipment is capable of achieving pollutant-specific emission limits. The initial performance test, and any subsequent performance tests conducted to demonstrate compliance, shall be performed in accordance with IDAPA 58.01.01.157, General Provision F of this permit, and the requirements outlined in the following subsections. The initial performance test shall be conducted within sixty (60) days after achieving maximum production rate at which the source will operate, but not later than one hundred eighty (180) days after plant modification. The annual compliance tests shall be conducted within thirteen (13) months after the previous initial performance or compliance test.*

4.2.1 *Sulfur dioxide. The performance test for SO<sub>2</sub> shall be conducted in accordance with 40 CFR 60.8 and 60.85. The test shall use as the reference methods and procedures the test methods described in 40 CFR 60 Appendix A. Method 8 (or an alternative method approved by both the Department in accordance with IDAPA 58.01.01.157 and the Environmental Protection Agency) shall be used to determine the concentration of SO<sub>2</sub>. The performance tests shall also include a performance evaluation of the continuous emissions monitoring system.*

4.2.2 *Sulfuric acid mist. The performance test for H<sub>2</sub>SO<sub>4</sub> mist shall be conducted in accordance with 40 CFR 60.8 and 60.85. The test shall use as the reference methods and procedures the test methods described in 40 CFR 60 Appendix A. Method 8 (or an alternative method approved by both the Department in accordance with IDAPA 58.01.01.157 and the Environmental Protection Agency) shall be used to determine the concentration of H<sub>2</sub>SO<sub>4</sub>.*

4.2.3 *Oxides of Nitrogen. The performance test for NO<sub>x</sub> shall be conducted in accordance with IDAPA 58.01.01.157. The test shall use as the reference methods and procedures the test methods described in 40 CFR 60 Appendix A. Method 7 (or an alternative method approved by the Department in accordance with IDAPA 58.01.01.157) shall be used to determine the concentration of NO<sub>x</sub>.*

4.2.4 *Particulate matter. A performance test shall be conducted to evaluate total PM<sub>10</sub> from the #3 sulfuric acid plant and to establish an emissions factor for setting an emissions limit. The test shall use as the reference methods and procedures the test methods described in 40 CFR 51 Appendix M. Method 201A and Method 202 (or alternative methods approved by the Department in accordance with IDAPA 58.01.01.157) shall be used to determine the concentration of PM<sub>10</sub>.*

4.2.5 *Ammonia. The performance test for NH<sub>3</sub> shall be conducted in accordance with IDAPA 58.01.01.157.*

### **Revised Permit Conditions**

Compliance with the NSPS standard remains unchanged, although the permit conditions were modified to remove the initial performance test requirement that was required by a previous permit action. Simplot will continue to use the SO<sub>2</sub> CEMS to monitor emissions for compliance with the NSPS emissions standard (4 pounds of SO<sub>2</sub> per ton of 100% sulfuric acid produced). The permit continues to require annual SO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub> testing to verify compliance with the NSPS standards. A statement was added at the end of the existing permit condition to confirm that compliance with the NSPS standards can be determined using the alternate calculation procedures in 40 CFR 60.84(d) and 60.85(c) because

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the plant processes elemental sulfur and uses air to supply oxygen.

### 2.8 NSPS Annual Compliance Tests

*The permittee shall perform an annual test to demonstrate compliance with the SO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub> NSPS emissions standards in Permit Conditions 2.3.6 and 2.3.7.*

- 2.8.1 *Sulfur dioxide: The performance test for SO<sub>2</sub> shall be conducted in accordance with 40 CFR 60.8 and 60.85. The test shall use as the reference methods and procedures the test methods described in 40 CFR 60 Appendix A. Method 8 (or an alternative method approved by both DEQ in accordance with IDAPA 58.01.01.157 and the EPA) shall be used to determine the concentration of SO<sub>2</sub>. The performance tests shall also include a performance evaluation (Relative Accuracy Test Audit (RATA)) of the continuous emissions monitoring system in accordance with 40 CFR 60 Appendix B. The permittee may use the alternate continuous emissions monitoring procedure in 40 CFR 60.84(d) to determine the SO<sub>2</sub> emissions rate in terms of the standard.*
- 2.8.2 *Sulfuric acid mist: The performance test for H<sub>2</sub>SO<sub>4</sub> shall be conducted in accordance with 40 CFR 60.8 and 60.85. The test shall use as the reference methods and procedures the test methods described in 40 CFR 60 Appendix A. Method 8 (or an alternative method approved by both DEQ in accordance with IDAPA 58.01.01.157 and the EPA) shall be used to determine the concentration of H<sub>2</sub>SO<sub>4</sub>. The permittee may use the alternate continuous emissions monitoring procedure in 40 CFR 60.85(c) and 60.84(d) to determine the H<sub>2</sub>SO<sub>4</sub> emissions rate in terms of the standard.*
- 2.8.3 *Throughput: The production rate in tons per hour (T/hr) and the operating parameters described in Permit Condition 2.12 shall be recorded during each performance test.*

The second part of the monitoring is for the SO<sub>2</sub> pound per hour and ton per year limits. A description of the reasoning and details of the methods that will be used to implement this permit condition are included as Appendix B of this statement of basis.

### 2.9 Continuous Emissions Monitoring – Demonstration of Compliance with the SO<sub>2</sub> pound per hour and ton per year limits

*The permittee shall:*

- *Install, calibrate, maintain, and operate CEMS with automated data acquisition and handling system for measuring and recording SO<sub>2</sub> and O<sub>2</sub> concentrations;*
- *Operate CEMS in accordance with 40 CFR 60.13, 40 CFR 60 Appendix B, and QA procedures of 40 CFR 60 Appendix F;*
- *Monitor and record sulfuric acid production rate in tons 100% H<sub>2</sub>SO<sub>4</sub> per hour;*
- *Calculate and record SO<sub>2</sub> emission in pounds per ton of 100% H<sub>2</sub>SO<sub>4</sub> in accordance with 40 CFR 60.84(d);*
- *Calculate and record hourly, three-hour average SO<sub>2</sub> emissions in pounds per hour as the product of pounds of SO<sub>2</sub> per ton of 100% H<sub>2</sub>SO<sub>4</sub> and tons of 100% H<sub>2</sub>SO<sub>4</sub> produced (arithmetic average of the proceeding three-hour period);*
- *Calculate and record monthly, twelve-month rolling total SO<sub>2</sub> emissions in tons per year as the sum of the current month emissions and the preceding 11 month total emissions.*

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The annual compliance test requirements for NO<sub>x</sub>, PM<sub>10</sub>, and NH<sub>3</sub> were appended to clarify that the mass emissions rate must be calculated using measured pollutant concentration and the volumetric flowrate data collected from EPA Method 2. This is currently being done by Simplot in most instances. The test requirements were also appended to clarify that the test data should be used when determining annual emissions for these pollutants

### 2.10 Annual Compliance Tests – Demonstration of Compliance with H<sub>2</sub>SO<sub>4</sub>, NO<sub>x</sub>, PM<sub>10</sub>, and NH<sub>3</sub> Limits

*The permittee shall conduct performance tests to demonstrate that the source is capable of achieving pollutant-specific emissions limits. Performance tests conducted to demonstrate compliance shall be performed in accordance with IDAPA 58.01.01.157, General Provision 6 of this permit, and the requirements outlined in the following subsections. The annual compliance tests shall be conducted within thirteen (13) months after the previous performance or compliance test.*

- 2.10.1 *Sulfuric acid mist: Compliance with the H<sub>2</sub>SO<sub>4</sub> pound per hour emissions limit in Permit Condition 2.3.2 shall be determined by multiplying the H<sub>2</sub>SO<sub>4</sub> emissions rate from the test required in Permit Condition 2.8, which is in units of pounds H<sub>2</sub>SO<sub>4</sub> per ton of 100% H<sub>2</sub>SO<sub>4</sub> production, by the tons of 100% H<sub>2</sub>SO<sub>4</sub> produced. The permittee shall use the pound per ton emissions factor in addition to the production data to determine the annual H<sub>2</sub>SO<sub>4</sub> emissions.*
- 2.10.2 *Oxides of Nitrogen: The performance test for NO<sub>x</sub> shall be conducted in accordance with IDAPA 58.01.01.157. The test shall use as the reference methods and procedures the test methods described in 40 CFR 60 Appendix A. Methods 2 and 7 (or an alternative method approved by DEQ in accordance with IDAPA 58.01.01.157) shall be used to determine the NO<sub>x</sub> emission rate. The permittee shall use the performance test to develop a pound per ton emissions factor that will be used in addition to the production data to determine the annual NO<sub>x</sub> emissions.*
- 2.10.3 *Particulate matter: A performance test shall be conducted to evaluate total PM<sub>10</sub> from the No. 300 sulfuric acid plant and to establish an emissions factor for setting an emissions limit. The test shall use as the reference methods and procedures the test methods described in 40 CFR 51 Appendix M. Method 201A and Method 202 (or alternative methods approved by DEQ in accordance with IDAPA 58.01.01.157) shall be used to determine the PM<sub>10</sub> emission rate.*
- 2.10.4 *Ammonia: The performance test for NH<sub>3</sub> shall be conducted in accordance with IDAPA 58.01.01.157 using EPA conditional test method 027 and EPA Method 2 to determine the NH<sub>3</sub> pound per hour emissions rate. The permittee shall use the performance test to develop a pound per ton emissions factor that will be used in addition to the production data to determine the annual NH<sub>3</sub> emissions.*
- 2.10.5 *Throughput: The sulfuric acid production rate (T/hr) and the scrubber operating parameters described in Permit Condition 2.12 shall be recorded during each performance test.*

### **Revised Permit Condition**

Permit Condition 2.11 for visible emissions monitoring was revised clarify that the opacity monitoring is to be determined from the No. 300 sulfuric acid plant stack. The previous version did not specify

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where the opacity monitoring was to be done.

### Existing Permit Condition

The following permit condition has been modified to require that the production rate be monitored and utilize the most recent compliance test information to calculate the emission rates on a monthly basis for NO<sub>x</sub> and SO<sub>2</sub>, as requested by the facility. This monthly emission calculation can be compiled to show compliance with the annual NO<sub>x</sub> and SO<sub>2</sub> limits.

*2.14.1 The production rate of the #3 sulfuric acid plant in tons per hour (T/hr) and tons per any consecutive twelve (12) month period (T/yr).*

### Revised Permit Condition

*2.12.1 The production rate of the #300 sulfuric acid plant in tons per hour (T/hr) and tons per any consecutive twelve (12) month period (T/yr). The hourly rates shall be compiled each month and used to calculate the annual T/yr of NO<sub>x</sub> and SO<sub>2</sub> emissions, based on the most recent source tests, for that month and for the most recent 12-month period, to assess compliance with the T/yr limit.*

### Removed Permit Condition

#### *3.1 Throughput Limits*

*The maximum production rate of the No. 3 sulfuric acid plant shall not exceed 1,750 tons of 100% sulfuric acid calculated as a rolling twenty-four (24) hour average.*

The facility requested that the maximum production rate of the No. 300 sulfuric acid plant limit be removed to allow the facility to produce additional acid at the facility rather than purchasing the acid from off-site sources. Performance tests were conducted for the No. 300 sulfuric acid plant which showed that the measured SO<sub>2</sub> emissions were less than the permitted SO<sub>2</sub> emissions limit. Therefore, an increase in production will not result in an increase of SO<sub>2</sub> emissions exceeding the SO<sub>2</sub> limit established in the previous permit action. The source test results are shown in Table 5.7.

**Table 5.7 SOURCE TEST RESULTS FOR SO<sub>2</sub> FROM TESTS FROM THE MOST RECENT TWO TESTS**

Test Year	H <sub>2</sub> SO <sub>4</sub> Throughput, T/hr	Corresponding NSPS SO <sub>2</sub> emission rate, lb/hr (Calculated as part DEQ review of test)	SO <sub>2</sub> Permit Emissions Limit, lb/hr
2004	71.4	78	170
2005	72.6	94	

Calculate the highest lb/ton: 101 lb SO<sub>2</sub>/72.6 T production = 1.29 lb SO<sub>2</sub>/T production

Facility projected maximum throughput: 2000 T/day

Calculate average SO<sub>2</sub> emissions for projected throughput:

1.29 lb/T x 2,000 T/day / 24 hr/day = 108 lb SO<sub>2</sub>/hour

Calculate projected average emission rate of SO<sub>2</sub>:

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108 lb SO<sub>2</sub>/170 lb SO<sub>2</sub> limit = 64% of the currently permitted emission limit of SO<sub>2</sub>.

The production rate could be increased, assuming that SO<sub>2</sub> emissions increase linearly with an increased production rate, to a production rate as calculated as follows:

170 lb SO<sub>2</sub> (limit)/hr x 1 T production/1.29 lb SO<sub>2</sub> x 24 hr/day = 3163 T/day production

Similarly, the same calculation method was used to sulfuric acid mist.

The source test results for acid mist are shown in Table 5.8.

**Table 5.8 SOURCE TEST RESULTS FOR ACID MIST**

Test Year	H <sub>2</sub> SO <sub>4</sub> Throughput, T/hr	Corresponding NSPS acid mist emission rate, lb/hr (Calculated as part DEQ review of test)	Acid Mist Permit Limit lb/hr
2004	71.4	0.9	3
2005	72.6	0.4	

Calculate the highest lb/ton: 0.9 lb mist/71.4 T production = 0.013 lb mist/T production

Facility projected maximum throughput: 2000 T/day

Calculate average acid mist emissions for projected throughput:

0.013 lb/T x 2,000 T/day / 24 hr/day = 1.08 lb mist/hour

Calculate projected average emission rate of acid mist:

1.08 lb mist/3 lb mist limit = 36% of the currently permitted emission limit of sulfuric acid mist.

The production rate could be increased, assuming that acid mist emissions increase linearly with an increased production rate, to a production rate as calculated as follows:

3 lb mist (limit)/hr x 1 T production/0.013 lb mist x 24 hr/day = 5538 T/day production

Because the projected maximum throughput of 2000 T/day is at most 64% (see analysis for SO<sub>2</sub>) of the amount that is estimated that could exceed the emission limit, it is unlikely that the emissions would be exceeded, so no throughput limit is necessary. An annual source test for SO<sub>2</sub> will be required in this permit as discussed in Section 5 of this statement of basis to verify that the SO<sub>2</sub> emissions are not exceeded.

To determine compliance with pollutant emission limits, specifically NO<sub>x</sub> and SO<sub>2</sub>, the facility will monitor the production rate, as required by Permit Condition 2.8.1, and utilize the latest compliance test information to calculate the emission rates on a monthly basis. The facility will continue to conduct annual compliance tests as currently required in the existing permit. In addition, the CEMS for SO<sub>2</sub> will continue to be used to determine the SO<sub>2</sub> emission rate.

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### **Relocated Permit Condition**

The Certification of Documents permit condition is in the permit as General Provision 9.

The following permit conditions were revised to match the permit conditions in Tier I Operating Permit No. T1-040313. These decisions were determined in the permit action for the Tier I operating permit.

### **Previous Permit Condition**

The following permit condition was removed. The limits are stated in individual permit conditions rather than in a table format.

*Sulfur dioxide (SO<sub>2</sub>), sulfuric acid mist (H<sub>2</sub>SO<sub>4</sub>), oxides of nitrogen (NO<sub>x</sub>), particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers (PM<sub>10</sub>), and ammonia (NH<sub>3</sub>) emissions from the No. 3 sulfuric acid plant stack shall not exceed any corresponding emission rate limits listed below and summarized in Appendix A of this permit.*

### **Previous Permit Condition**

The following permit condition was removed and will be relocated in the Tier I operating permit.

### **NSPS Notifications**

The permittee shall follow the notification and recordkeeping requirements for NSPS as outlined in 40 CFR 60.7. Notification requirements to the EPA include, but are not limited to:

- Notification of the date reconstruction commenced, postmarked no later than thirty days after such date.
- Notification of the actual date of initial startup of the modified facility, postmarked no later than fifteen days after such date.
- Notification of any physical or operational change which may increase the emissions rate of any regulated pollutant, postmarked at least sixty days before the change occurs.
- Notification of the date upon which demonstration of the continuous monitoring system performance commences.
- Notification of the anticipated date for conducting the opacity observations.
- Notification of any performance tests at least thirty days prior to the test.

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### 5. PERMIT FEES

Table 5.1 lists the processing fee associated with this permitting action. The facility is subject to a processing fee of \$2,500.00 because its permitted emissions increase is 7.0 T/yr. Refer to the chronology for fee receipt dates.

**Table 5.1 PTC PROCESSING FEE TABLE**

Emissions Inventory			
Pollutant	Annual Emissions Increase (T/yr)	Annual Emissions Reduction (T/yr)	Annual Emissions Change (T/yr)
NO <sub>x</sub>	0.0	6	(6.0)
SO <sub>2</sub>	0.0	0	0.0
CO	0.0	0	0.0
PM <sub>10</sub>	13.0	0	13.0
VOC	0.0	0	0.0
HAPS	0.0	0	0.0
Total:	0.0	0	<b>7.0</b>
Fee Due	<b>\$2,500.00</b>		

### 6. PUBLIC COMMENT

A public comment period is being conducted for this permit action in accordance with IDAPA 58.01.01.209.05(c).

## **APPENDIX A – AIRS INFORMATION**



# **AIRS/AFS<sup>a</sup> FACILITY-WIDE CLASSIFICATION<sup>b</sup> DATA ENTRY FORM**

**Permittee/Facility Name:** J.R. Simplot Company, Don Plant

**Facility Location:** Pocatello

**AIRS Number:** 077-00006

AIR PROGRAM POLLUTANT	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MACT (Part 63)	SM80	TITLE V	AREA CLASSIFICATION A-Attainment U-Unclassified N- Nonattainment
SO <sub>2</sub>	A		H				A	U
NO <sub>x</sub>	A						A	U
CO	A						A	U
PM <sub>10</sub>	A						A	A
PT (Particulate)	A							
VOC	C							
THAP (Total HAPs)	C							
				APPLICABLE SUBPART				
				H				

<sup>a</sup> Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS)

<sup>b</sup> AIRS/AFS Classification Codes:

- A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For HAPs only, class "A" is applied to each pollutant which is at or above the 10 T/yr threshold, **or** each pollutant that is below the 10 T/yr threshold, but contributes to a plant total in excess of 25 T/yr of all HAPs.
- SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.
- B = Actual and potential emissions below all applicable major source thresholds.
- C = Class is unknown.
- ND = Major source thresholds are not defined (e.g., radionuclides).

## **Appendix B – SO<sub>2</sub> Compliance Demonstration**